

2017 CAFO Meetings

PRODUCTION SITE COMPLIANCE

Presentation Overview

- ⦿ Permit Requirements –production area
- ⦿ Monitoring & Inspection Program
- ⦿ Daily, Weekly, Quarterly Inspections
 - What areas to inspect
 - What needs to be recorded
 - What needs to be reported
- ⦿ DNR Production Site Inspections
- ⦿ General Suggestions

Production Area Discharge limitations

First section of every WPDES Permit:

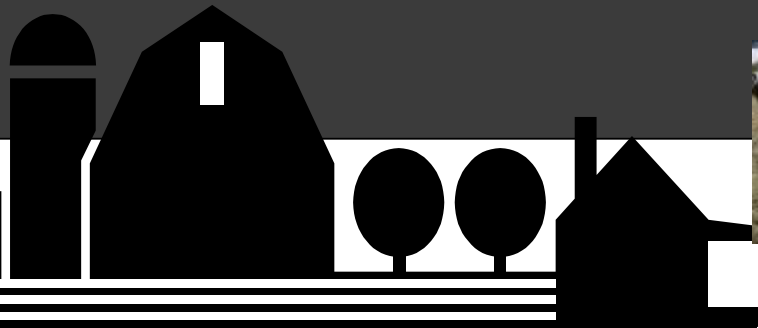
A large CAFO may not discharge manure or process wastewater pollutants to navigable waters from the production area, unless all of the following apply:

1. Precipitation causes an overflow of manure or process wastewater from a containment or storage structure.
2. The containment or storage structure is properly designed, constructed and maintained to contain all manure and process wastewater from the operation, including the runoff and the direct precipitation from a 25-year, 24-hour applicable rainfall event.
3. The production area is operated in accordance with the inspection, maintenance and record keeping requirements in s. NR 243.19.
4. The discharge complies with water quality standards.

What this means: Under very limited circumstances can a production site discharge polluted runoff to surface waters.

Note: There is additional permit language regarding groundwater and wetland discharge limitations.

“No Discharge” from Animal Production Area to Navigable Waters



1. Contaminated runoff from 25-yr 24-hr storm

2. Process waste water (milking center waste, feed storage leachate)

3. Manure

Overflows prohibited, unless 1, 2, and 3 contained



Seepage (allowed, provided no exceedance of groundwater standards)



Monitoring and Inspection Program

- NR 243.19 Inspections, record keeping and reporting. (1) MONITORING AND INSPECTION PROGRAM. In accordance with a WPDES permit, the permittee shall submit a monitoring and inspection program designed to determine compliance with permit conditions that identifies the areas that the permittee will inspect in accordance with this section, the person responsible for conducting the inspections and how inspections will be recorded and submitted to the department. The monitoring and inspection program shall be consistent with the requirements in this subsection.

2.1 Monitoring & Inspection Program


Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 90 days of the effective date of this permit.	02/01/2017

**WHERE, WHAT AREAS SPECIFIC TO YOUR FARM?
WHO'S DOING INSPECTION?
RECORDED HOW?**

Daily inspections

- Daily inspection for leakage of all water lines that potentially come into contact with pollutants or drain to storage or containment structures or runoff control systems, including drinking or cooling water lines.
 - Cattle waterers
 - Barn sprinkler systems
 - Milkhouse or parlor water lines

10/10/10
 Local DNR Contact Phone # _____ Country LCD # _____

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		<ul style="list-style-type: none"> • Review Nutrient Management Plan, strategies for sensitive areas protection and phosphorus management. • Determine rates of manure to apply per field/acre and from each manure storage structure. • Calibrate manure spreader and check equipment. 			Start 10 Pumping	
3 X Inspect water line AO	4 X Inspect water line X Stormwater controls X Runoff controls AO	5 X Inspect water line X Storage/containment X Head depth marker and record level AO/20	6 X Inspect water line AO	7 X Inspect water line AO	8 X Inspect water line AO	9 X Inspect water line AO
10 X Inspect water line AO	11 X Inspect water line X Stormwater controls X Runoff controls AO	12 X Inspect water line X Storage/containment X Head depth marker and record level AO/19	13 X Inspect water line AO	14 X Inspect water line AO	15 X Inspect water line AO	16 X Inspect water line AO
17 X Inspect water line AO	18 X Inspect water line X Stormwater controls X Runoff controls AO	19 X Inspect water line X Storage/containment X Head depth marker and record level AO/13	20 X Inspect water line AO	21 X Inspect water line AO	22 X Inspect water line AO	23 X Inspect water line AO
24 X Inspect water line AO	25 X Inspect water line X Storage/containment X Stormwater controls X Runoff controls AO	26 X Inspect water line X Storage/containment X Head depth marker and record level AO/9	27 X Inspect water line AO	28 X Inspect water line AO	29 X Inspect water line AO	30 X Inspect water line AO

06.28.2016

WHERE?
 WHO?
 RECORDED HOW?

Older milkhouse systems
Calf mixing / cleaning areas
Floor drains connected to tile



Weekly inspections

- ◉ Weekly inspections to ensure proper operation of all **storm water diversion devices** and **devices channeling contaminated runoff** to storage or containment structures.
 - Contaminated runoff
 - Feed storage runoff conveyances (overland, piped, vegetated treatment areas, etc.)
 - Feedlot runoff systems (sediment basins, pickets, piped, vegetated treatment areas, etc.)
 - Manure transfer/overland flow (i.e. exercise clean-out valves)
 - Storm Water Conveyances
 - Grass ditches
 - Tile / culvert drainage
 - Roof gutters
 - Diversion berms
 - Storm water ponds
 - Curbing

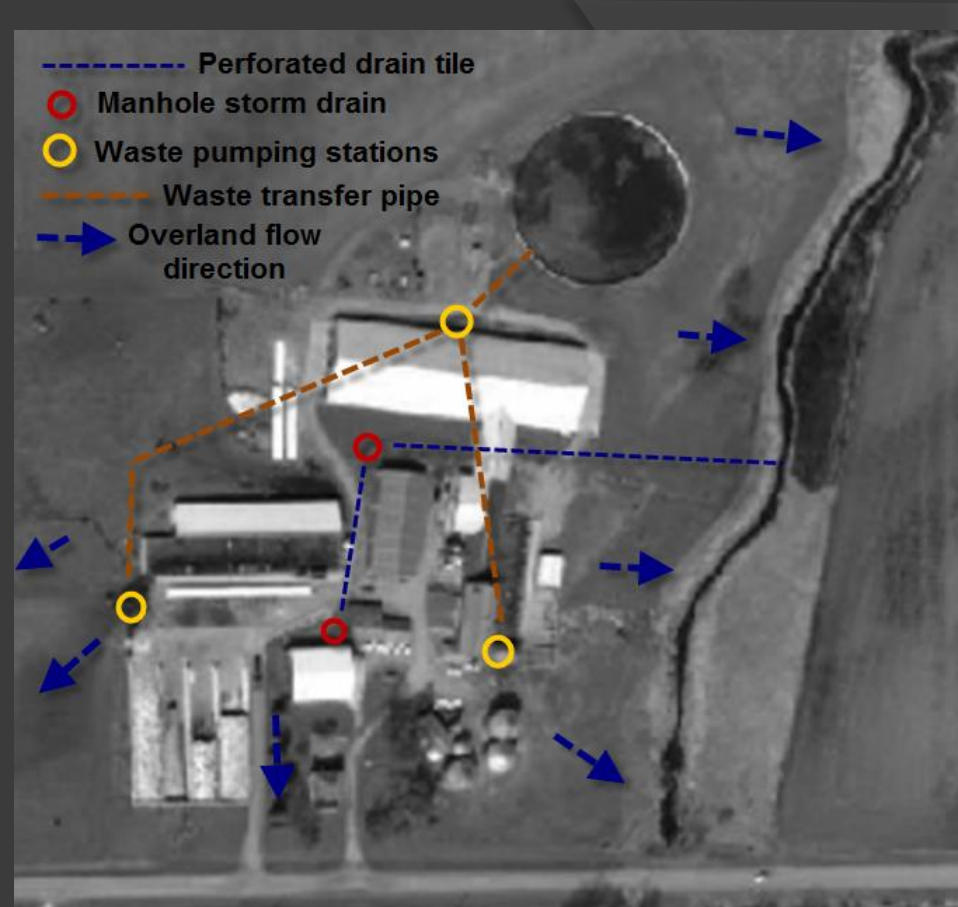
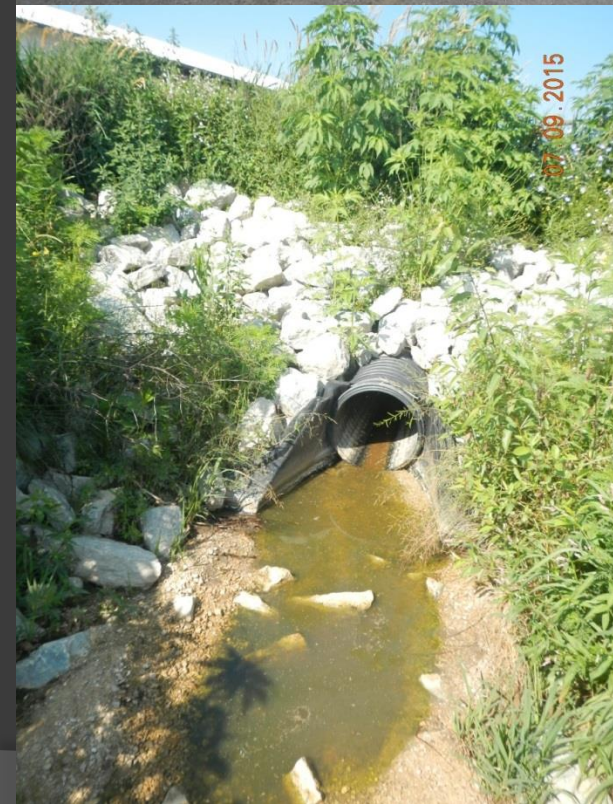


WHERE?
WHO?
RECORDED HOW?



- Feed storage VTA maintenance
- Clean out sediment/feed in screens
- Mow/kill weeds around pumping stations
- Check pumps weekly to ensure they are functioning





Monitoring program should have diagram to show all areas needing weekly inspection.

- Stormwater tile outlets around production site
- Manhole and drain intakes for stormwater or waste (clear debris)
- Bunker perimeter tile to intercept leachate
- Main ditches carrying stormwater offsite

Fix issues causing discharges immediately

- Signs of overflow or bypass of collection system (dead grass, erosion, etc.)

Perform regular maintenance on containment systems

- Repair cracks in concrete
- Stabilize or reseed flow paths

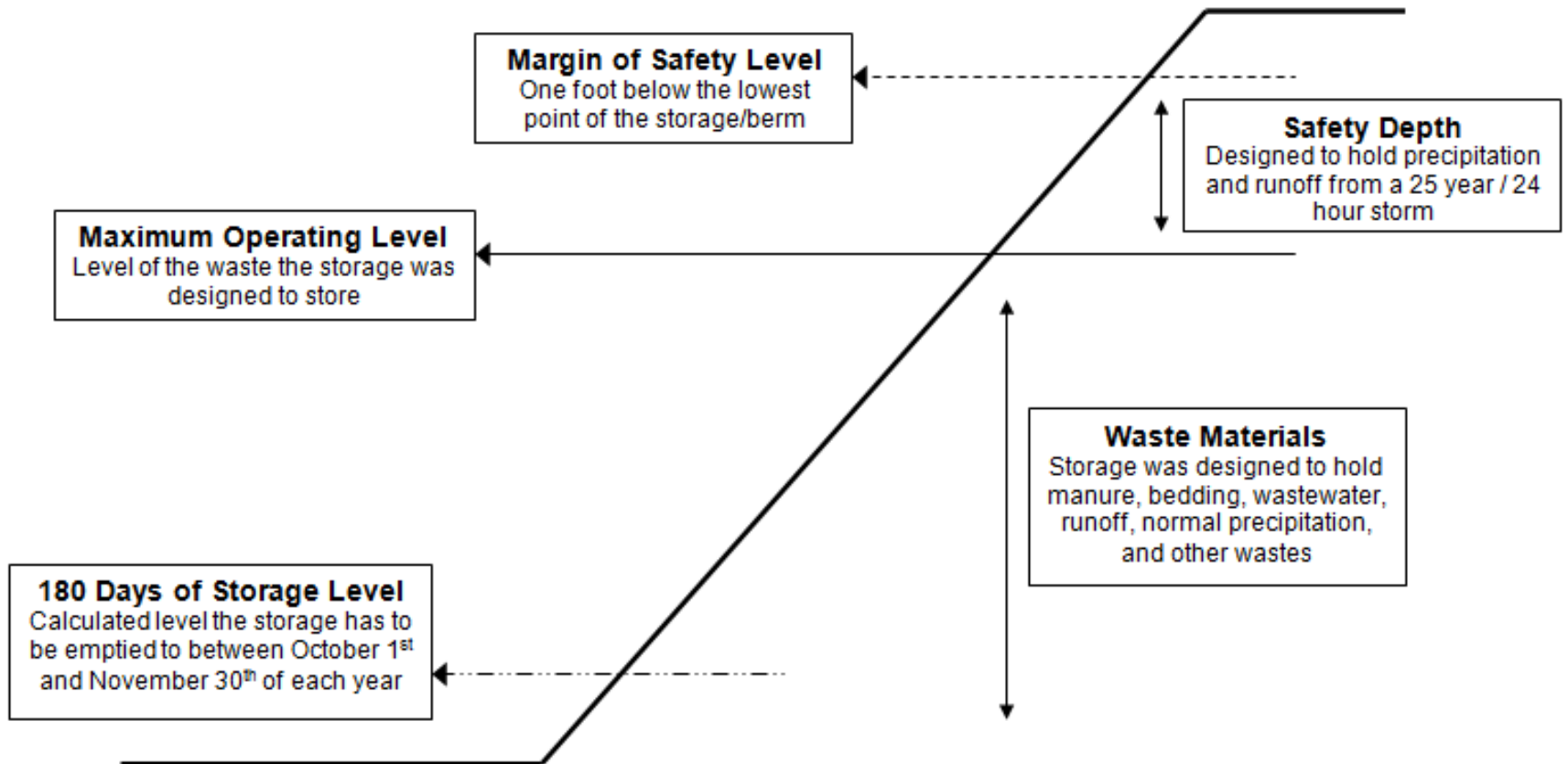


Weekly inspections

- Weekly inspections of **liquid storage and containment structures**. For liquid storage and containment facilities, the berms shall be inspected for leakage, seepage, erosion, cracks and corrosion, rodent damage, excessive vegetation and other signs of structural weakness. In addition, the **level of material in all liquid storage and containment facilities shall be measured and recorded in feet or inches above or below the margin of safety level**.
 - Are permanent markers in place?
 - Type and condition of storage
 - Berm settling? Rodent Holes? Ruts? Large cracks? Underwelling?
 - Agitation area condition
 - Weir overflow functioning
 - Sand cell removal methods
 - Is fencing in place around storage?
 - Headland Stacking Sites require weekly inspections



Storage markers



Assistance from engineer will likely be necessary to ensure that markers are installed in the correct location.





- ## Solid manure stacking practices in production area:
- Has to be on a designed storage pad with collection of runoff
 - Keep stack on pad / keep away from edges
 - Clean up spillage
 - Separated sand must still be treated as manure
 - End of barn areas considered “staging” sites not manure storage



Headland Stacking Sites

- Stacking sites are considered part of the production area and are required to meet the same discharge requirements as the production area. These sites should be included in the weekly inspections requirements to ensure BMPs and water diversion structures are functioning properly.



Quarterly inspections

- Quarterly inspections of the production area, including outdoor animal pens, barnyards and raw material storage areas. CAFO outdoor vegetated areas shall be inspected quarterly.
 - Standard maintenance of feed storage floors and walls
 - Dry commodity areas – minimize windblown feed
 - Feedlot containment area maintenance
 - Cattle lanes and walkway area containment
 - Earthen lots not typically allowed under permit
 - CAFO outdoor vegetated areas
 - Sustain adequate vegetation across entire area
 - Utilize proper stocking densities
 - Manage timing of use (i.e. dry weather, growing season, etc.)



- VTAs & filter strips – assess ability to treat waste / remove solids / reseed / regrade
- Earthen lots – remove cattle if not sustaining vegetation / plan for housing or containment system
- Calf hutch areas – assess management and controls in place



- Keep feed properly covered, don't use waste feed to hold plastic edges down
- Inspect backside areas of bunker walls
- Clean out and replace gravel tile drain systems
- Clean up spilled and waste feed
- Don't burn ag plastic



DNR Inspections – What to expect

◎ Same areas inspected

- Feedlots
- Waste Storages
- Process Wastewater Handling
- Feed Storage Areas
- Animal Mortality Handling
- Stormwater Pathways / other Ancillary areas
- Outdoor Vegetated Animal Lots



◎ Same records reviewed

- Permit and Nutrient Management Plan
- Inspection records
- Land application records
- Emergency response and monitoring and inspection program

What to expect, continued

- More detailed records review – permittee needs to have everything available and ready
- Longer inspection and meeting time (2-4 hours minimum)
- Potentially shorter notification of inspection time to enable wet weather inspections
- More water sampling by DNR staff
- Greater inspection frequency (production site and land application sites)

Inspection Reports

- Site Observations
- Records Review Summary
- Summary will include:
 - Substantial Compliance Determination
 - Areas of Concern
 - Permit Violations*
 - Action Items
 - Items for Next Permit Term



*If multiple minor violations or any major violations are documented, enforcement action will be implemented

General Suggestions

- ⦿ Mow areas where visual inspections are required
- ⦿ Perform regular maintenance on pumps and other mechanical systems
- ⦿ Consider secondary containment or sensors in the event of system failure
- ⦿ Staff training to promote good housekeeping practices / designate specific staff for compliance duties
- ⦿ Seek assistance from consultant
- ⦿ If unsure of what you need to do, call DNR contact

Be proactive with compliance

DNR CAFO Program Contacts:

<http://dnr.wi.gov/topic/AgBusiness/CAFO/Contacts.html>